Source Water Protection Citizen Technical Advisory Committee (CTAC) Source Water Assessment Plan Update - Subcommittee Meeting

February 28, 2019
Draft Meeting Minutes
Meeting Location: Tidewater Utilities Conference Room

WELCOME & INTRODUCTIONS - Douglas E. Rambo, P.G., DNREC, Division of Water

Mr. Rambo called the meeting to order at approximately 10:15 a.m. and welcomed everyone. He said, "Our primary discussion is going to be the potential of adding a chapter or appendix to the Source Water Plan with things that have been brainstormed by the Program that make sense about including in our processes and in our procedures for documenting the wells, getting them into our Program, and eventually coming up with their Source Water Assessment."

Mr. Rambo asked for introductions around the table. The attendance list is included at the end of the meeting minutes.

REVIEW AND APPROVAL OF THE JANUARY 31, 2019 DRAFT MEETING MINUTES

Mr. Rambo asked if anyone had any edits to the January meeting minutes and stated that due to the short notice that the minutes were e-mailed out, any comments or edits would be accepted by e-mail through next week. Mr. Todd Keyser mentioned an e-mail he sent and Mr. Rambo replied that he did receive it. Mrs. Laura Mensch e-mailed comments and edits on March 1, 2019 and were incorporated into the final minutes.

Final meeting minutes are posted online at https://publicmeetings.delaware.gov/Meeting/61601.

DISCUSSION: ADDING CHAPTER / APPENDIX ON SWAPP PROCEDURES – Douglas E. Rambo, P.G., DNREC, Division of Water

Mr. Rambo said, "One of the things that has plagued our Program with respect to having public wells out there and available in the planning process is when a public well comes online, we may not get a wellhead delineation up for quite some time. And one of the things that has been kicked around our office is at the time of permitting that we would apply an Arbitrary Fixed Radius delineation to a new public well and then get that uploaded to First Map. A lot of times during the Preliminary Land Use Service (PLUS) reviews that the Department gets, we may miss public wells that are actually serving people because a wellhead protection area delineation hasn't been performed on that well. So, this is a way to put in a wellhead area that is protective but it may exceed what the Counties and municipalities are expecting, a lot of them being 150 feet wellhead protection areas. At least it would put an area on the map and it would give the Counties and municipalities an opportunity to engage with DNREC to say 'is there an opportunity for this wellhead area to be reduced?' That would put it on our priority list of

delineation and assessments." Mr. Rambo said this was the first bullet point item under this category on the agenda and asked for feedback from the Committee.

Mr. Keyser said, "How often are new public wells with large capacities coming online?" Mr. Keyser then restated his question, "How often are new public wells coming online?" Mr. Rambo replied, "We get about 60 standard publics a year. It's not a whole lot being added to the population. It may be a little bit more since the regulations were updated and we removed the miscellaneous public status. But still, it's probably in the order of 60-100 public wells annually. Todd said, "Okay." Mr. Walt Bryan asked Mr. Rambo, "What's a public well?" Mr. Rambo replied, "A public well is a well that serves 15 service connections at minimum or for a transient it's 25 persons less than 6 months out of the year." Mr. Bryan said, "The reason I'm asking as a developer I've been called upon to work on a subdivision that's got a lot of hiccups and it's got a central private septic system and I asked about water and they said 'we have two wells'. That's why I ask what's a public well." Mr. Matthew Grabowski added, "It's defined in the well regulations at least for what Doug's (Mr. Rambo) talking about. It's going to depend on who's using it. The public well itself is defined as a well that's used to supply water to more than three dwellings, dwelling units, employees for the preparation for manufacturing of food or beverages, or to the public at large." Mr. Bryan said, "Okay. I understand." Mr. Grabowski continued, "But the service connection and all that, that's related to a public water system." Mrs. Laura Mensch said, "I have a question just for my own curiosity. Is there an increased number of public wells overall in the State? I'm assuming that the number is just growing and growing because our population is increasing. Do you keep track of the rates of abandonment?" Mrs. Mensch continued to discuss and Mr. Rambo replied, "A small percentage of that is abandonment." Mrs. Mensch said, "So each year, you're increasing." Mr. Rambo answered, "Yes." Mr. Andrew Homsey said, "That was my question, too. So, a follow-up to Laura (Mrs. Mensch), are there other plans to expand any kind of service provision from a central provider like Tidewater? When somebody gets public water, in other words, what happens to the well?" Mr. Rambo replied, "For a domestic or if a domestic is hooked up to public water, they're required to either convert that to an agricultural well or abandon their supply." Mrs. Sheila Shannon said, "It has to be disconnected." Mr. Rambo replied, "Yes." Mr. Homsey said, "So that doesn't happen too much?" Mr. Rambo answered, "Well, that happens, yes." Mr. Homsey asked, "But you said it's just a small percentage?" Mr. Rambo replied, "There are a small percentage of public wells that are abandoned on an annual basis. For the water systems that take over a new development or something like that, there are a number of domestic wells that are also abandoned because of that." Mr. Rambo, Mr. Homsey, and Mrs. Mensch continued to discuss.

Mr. Homsey said, "I know we had a well and we went on public water and some people kept their well and I don't know where or in what database but some people had it filled with concrete and others, I assume, just did nothing. It just sits there." Mr. Rambo said, "Well, if they connected to public water then they were required to have their well disconnected from their plumbing system and then if there is still a pump in it then it's basically being used to water their lawn or wash their cars." Mrs. Samantha Smith asked, "Do they have to put in a permit to reclassify? Is that the process?" Mr. Rambo replied, "Yes."

Mr. Homsey said, "So, thinking of the water budget for water supply, that could be an increasing thing. I know a lot of people don't want to abandon their well because they figure I have a well and it costs money and I don't have to use it for drinking but I can use it for washing my car and stuff like that. Is that an issue?" Mr. Rambo said, "The only time a well really becomes an issue is if it's run into with a car or it becomes a potential source for downward migration of contamination. If it's constructed properly, it's generally not an issue." Mr. Homsey asked, "And supply is not an issue?" Mr. Rambo replied, "No, not really." Mrs. Mensch said, "That's an interesting point because there's a chance that we're not getting that information. So say a public system is estimating how much use there is including lawn watering or whatever but if there's situations those people are accessing their own wells then we aren't capturing that. I don't know how much that would count for." Mr. Homsey said, "Maybe less than the agricultural wells." Mr. Rambo replied, "On the reclassification part when they apply to reclassify their domestic well to that agricultural type well, we will be capturing what they estimate to pump on a daily basis in our database. If we were to dig deeper into our files, we could come up with an estimate for the wells that were reclassified." Mrs. Mensch said, "Fortunately, that doesn't seem to be as huge of an issue right now with ponds almost overflowing, but it could." Mr. Homsey said, "We could have a drought again."

Ms. Cathy Magliocchetti asked Mr. Rambo, "On the Arbitrary Fixed Radius, that would remain in place until such time as your Department reviewed the protection area, right?" Mr. Rambo replied, "Until we got around to doing the assessment for that well, it would fall into our regular que of assessments or it would get prioritized by either the owner or the County, or municipality asking us to reduce the area if it's a priority for them." Ms. Magliocchetti asked, "And would there be an occasion to expand the area?" Mr. Rambo answered, "If a large unconfined pumping well were to go in, it could get expanded. That's they only opportunity where a wellhead protection area would get larger from the Arbitrary Fixed Radius. But, that's if we had to do a full blown out groundwater model to estimate the capture area. Everything else, whether it's confined, unconfined, less than 50,000 gallons per day, in Kent and Sussex they would get a 150 foot fixed radius at most upon re-delineation. New Castle County would be at 300 feet unless an operator or two petition the Department to have that reduced to their minimum 150 feet and that's only if they can substantiate adequate confinement." Ms. Magliocchetti said, "And so is the intent to keep the 150 foot number until such time as it's requested to be reviewed or like what's the sense of a back log, in other words, in your Department? If you had Arbitrary Fixed Radius' for these wells and the user wasn't requesting a review by your Department, would you look at those anyway?" Mr. Rambo replied, "We would eventually get to them and delineate them to what they should be and then post the update to First Map." Ms. Magliocchetti said. "But they can move up in the que based upon the request from the applicant?" Mr. Rambo said, "Yes."

Mr. Homsey said, "If somebody does apply for it, does it automatically kick off a review on your part or are they required to do the modeling or do you do the modeling?" Mr. Rambo said, "The modeling is done in house." Mr. Homsey and Mr. Rambo continued to discuss. Mr. Keyser said, "I'm having trouble understanding the benefit of setting a default radius and then having to come back because if you are setting a default radius but not doing an assessment on that radius, what benefit does it provide to have that on First Map?" Mr. Rambo said, "The benefit is that a developer would be able to see that their well could potentially be impacted by land uses under

existing local ordinances." He continued, "They wouldn't know that a public well is potentially impacting their parcel. And then down the road we could come to find that somebody exceeded their impervious cover limitation within a wellhead protection area just because that wasn't caught early on in the process." Mr. Homsey asked, "What's the success rate of New Castle County because I know there's a lot of developments in New Castle County so there's got to be some kind of an issue?" He continued, "Is there a spike of trying to reduce the 300 feet radius to 150 or is it not an issue and people don't care that much?" Mr. Rambo replied, "It's not an extreme issue. Artesian has probably come in the most in the last 5 to 10 years just because of small lot sizes within the developments. In New Castle County it's not a huge issue." Mr. Homsey said, "And their success rate, would you rate it as decent?" Mr. Rambo replied, "Yes, it's a decent success rate. Artesian is mostly in the Potomac aquifer especially when you look at pump test evaluations you can easily see where a well has switched from leaky aquifer pumping to confined so you see where the effects of the water table drop and the confinement take over."

Mr. Rambo said, "So the question is, where would the Committee think that we should draw that line? How far out from the well as stated? New Castle County has a maximum wellhead protection area of 300 feet around low pumping wells and confined aquifer wells." Mr. Rambo continued to discuss the well review process at the Department and said, "We are currently using a 1,000 foot buffer around the well when we search for anything. It's very protective and allows us to reach out past dots that may be on the map for sites that have aerial extent such as wastewater spray irrigation sites, Super Fund sites, landfills, ..." Mrs. Shannon asked, "What about storm water ponds?" Mr. Rambo replied, "Currently storm water ponds aren't on our source water potential sources list. We talked about that last month as being added as part of the update to the Plan. Potentially, we would have the polygons related to the practices so if it's a basin we would have the outline of the basin and the extent of the trench that is put in."

Mrs. Mensch asked Mr. Rambo, "What is the reasoning behind the 300 versus 150 versus 1,000? So, if we're going to be suggesting the radius, it would be interesting to know what the current reason is behind the different distances. Obviously the 1,000 feet is very protective but what is the pros and cons?" Mr. Rambo answered, "Well, 150 feet is our State minimum wellhead protection area that goes back to the late 1980's when our Wellhead Protection Plan was approved by EPA. That was the minimum wellhead protection area that would be established around a pumping well." He continued, "300 feet came into play in the early 1990's when New Castle County updated their Unified Development Code. They had placed an arbitrary number of 300 feet around all public wells that are not large pumping unconfined. The 1,000 foot is an in-house number that we use just to make sure that we don't miss potential sources of contamination during our public well review process during permitting." Mrs. Mensch asked, "So, do you feel the need to keep that 1,000? It's kind of in-house and not on the books?" Mr. Rambo replied, "It all depends. For the permitting process, it has its pros and cons. Pros are we are able to see potentially Super Fund sites, landfills, and things like that that where the dot for them on a map may be outside of that 1,000 feet but the parameter of those actually are within the 1,000 feet so we have the ability to not miss a potential site. The cons are with some of these in our permitting process. There are also some buffers that are associated with these aerial sites so a spray irrigation site may have a 1,000 foot buffer around it so there's a chance that a 1,000 foot radius search could overlap with a buffer and then we would potentially be reviewing a site that doesn't fall within that 1,000 feet." Mrs. Mensch said, "I'm wondering if it's a valuable

thing to incorporate different tiers. In other words, you could leave open the option of doing 1,000, 300, or 150 all in one Plan. In other words, if a location meets a certain criteria, you're going to always use the 1,000 foot and if it doesn't, you're going to fall to the 300 or 150. In other words, you're going to have all three options available in the Plan and establish when we use each one. Or do you want to pick one and stick with it across the board no matter what?" Mr. Rambo responded, "Picking one and sticking with it across the board would be the simplest option because we don't want to be putting a three tiered buffer out on First Map around the well. Basically saying you're 1,000 feet but after proper delineation you could drop down to 150. That's quite a large change and would probably get a lot of issue with the development community." Mr. Homsey expressed to Mr. Rambo that he's not fully understanding the process. He said, "1,000 to 300 seems like a big jump." Mr. Rambo said, "Well, 1,000 is just a search that we use in-house. It's not a wellhead protection area. It's just a search around the well and we look for potential sources of contamination." Mr. Homsey asked, "But when you find something, how does that affect your final decision about whether the radius is adequate?" Mr. Keyser said, "There's a difference then because the 1,000 foot is part of the permitting process. If within the permitting process there's a new well proposed within a 1,000 feet of a groundwater management zone, what it triggers is a Hydrologist in Water and a Hydrologist in Waste and Hazardous Substances and they will then review the data we have available to determine whether or not the well going in needs to have extra measures of protection." Mr. Homsey and Mr. Keyser continued to discuss how it's flagged.

Mr. Keyser continued, "But it isn't necessarily saying this is your wellhead area. It's just saying that your close enough to a certain thing and we want to just look at it." Mr. Homsey said, "So, it could be that they would say it's fine at 300 or you might say 500." Mr. Keyser said, "Because a site is not a size in itself. Sometimes we have sites that are huge boundaries and they are essentially just paperwork?" Mrs. Mensch said, "And you might need that 1,000 foot radius as part of a separate process but we're not going to include it in this document, right? So we don't really need to exclude that because that's going to happen anyway and that's part of the screening so that isn't really the legitimate thing we are considering adding into this document." Mr. Rambo said, "Right. The 1,000 foot is a screening tool during the application process for the review of the public well." Mr. Homsey said, "So, it triggers something for you to take a little closer look at, basically." Mr. Rambo said, "Right. And in the process of the review if something were to come up in that well 15 years down the road we would be able to go back to that review and see what was reviewed for that site. It would help us narrow down the potential sources that didn't fall within the prescribed wellhead protection area."

Mr. Keyser said, "I don't think Doug (Mr. Rambo) is proposing to use a 1,000 foot radius as a wellhead protection area. I think that's never been on the table." Mr. Rambo said, "No, it's not on the table. I just threw that out there as what we use in-house to review a public well." Mr. Keyser said, "And to Laura's (Mrs. Mensch) point, it might be worthwhile within the actual Plan because there are these different defined radii, one of which is purely for search and the other two which are default wellhead areas. At least spell that out in the Plan to say this is what these numbers mean and use that gives information to someone putting in a well and realizes no I'm not going to have a 1,000 foot radius wellhead protection area that I suddenly have to address." Mrs. Mensch added, "And it would give you a little bit more leeway instead of us establishing one radius across the board in every situation you're going to say actually these are the different

values that we use and why and if it's working for you, establish why you're using it." Mr. Keyser then added, "But then default to 300 feet if it's protective without being extreme and if there is a concern related to property rights and limitations and things like that, then someone can make a request and I think in the Plan you still have. This is exactly how you request for priority review of your wellhead area. This is who you contact." Mrs. Mensch said, "So, 300 and then options to decrease it?" Mr. Keyser replied, "Yes, because people like the restricted area that's more. You're never going to want to see it go from this to something bigger. But some of them may be modeled bigger but that's a different story." Ms. Magliocchetti said, "Are you saying 300 feet in New Castle County or Statewide?" Mr. Keyser replied, "Statewide." Mrs. Mensch asked, "New Castle County decided to pick 300 feet, why?" Mr. Rambo responded, "I wasn't on the Resource Protection Area Technical Advisory Committee when they made those recommendations." Mrs. Smith asked, "Is there any way to access that information? Would it be worth looking back over to see why they determined 300 feet?" Mr. Grabowski said, "How long ago was that?" The Committee all responded that it was the early to mid 1990's. Mrs. Smith said, "If it would even be worth looking at." Mr. Homsey said, "I think we have enough knowledge, information, and expertise now to assess whether that is reasonable. I'm assuming there was a reason there was a reasonable reason to choose it." The Committee continued to discuss.

Ms. Magliocchetti asked Mr. Rambo, "From your perspective, if we were to expand to 300 inclusion in this Plan would cover that. You wouldn't need any additional State approved or regulation to expand that area?" Mr. Rambo said, "Well, since the wellhead protection area was originally approved by EPA in our Wellhead Protection Plan, we would think that a change to our wellhead protection are submitted through the Source Water Assessment Plan update could supersede that and the EPA approval for the Program would be what's required." Ms. Magliocchetti responded, "Okay." Mr. Homsey said, "Does DNREC have a position on any of this?" Mr. Rambo replied, "For me as a Hydrologist and having to do the Plus Reviews for the Program and having to tell developers that there are public wells in the vicinity, I can't say that they impact the parcel yet because they haven't officially been delineated. If it's a confined aguifer well, I can say we expect a 150 foot delineation around this well, therefore, it will not impact your parcel or if it's a high pumping unconfined well at this point we cannot tell you what impacts that well is going to have and what requirements you are going to need to do on your parcel. It does have some implications to what we do." Mr. Homsey said, "Wouldn't it be simpler to have 300 feet?" Mr. Rambo replied, "Yes it would be simpler in those cases." Ms. Magliocchetti said, "Well, it could also be more onerous that it would increase the number of reviews that your office will have to process." Mr. Rambo said, "We review every public well that comes through the Department. All public wells get reviewed regardless of there being any potential sources of contamination within 1,000 feet. What it would do is upon permitting it would allow us to throw that radius onto the map and get it out there in case projects do come up that could be impacted or could impact the well."

Mr. Rambo said, "So, I'm getting the sense of those in attendance that the 300 foot is a good starting point?" The Committee discussed. Mr. Homsey asked, "Is it better to know from a developer's perspective?" Mr. Keyser said, "Is there clarity in that larger number? Is it helpful? If it's not helpful, let's not do it." Mr. Rambo said, "The statement can be made that if it is pumping under 50,000 gallons per day or in a confined aquifer the wellhead protection area has

the ability to decrease in size. If it's an unconfined well pumping greater than 50,000 gallons per day, there is a strong possibility that it will increase in size." Mr. Homsey asked, "From 150 or 300?" Mr. Rambo said, "From the 300."

Mr. Bryan said, "As a developer, we primarily look for public water and public sewer." He discussed examples with the Committee. He continued, "Back to your 150, 300, or 1,000, it would seem to me that if you analyze, or whatever the word is, 300 feet you'd get a pretty good recognition of what's going on. My next question would be your proposing changes. How are these changes implemented? I wouldn't think they would take Legislative action, do they? Can it be done within DNREC?" Mr. Rambo said, "For the wellhead protection area for us to make changes to the wellhead protection area, we have to have an approved plan through EPA and so we have to go through a public process of recoding and justifying reasoning for changing our wellhead protection area process." Discussion continued. Mr. Rambo mentioned again the public process to make changes and then this can eventually impact how we do the assessments for the public drinking water systems down the road. Mr. Rambo said, "We will look at incorporating the 300 versus 150 preliminary delineation into the process and we will look at addressing that in the Section for groundwater delineation that we discussed last month splitting the delineation section into two separate chapters, one for Source Water and one for Groundwater, and we'll incorporate the 300 versus 150 into the groundwater delineation section." Mrs. Smith asked, "And that's going to be for all Counties?" Mr. Rambo replied, "Yes, it will be Statewide."

Mr. Rambo referred to the next bullet on the agenda and said, "This is something we've been talking about in-house is that when a public well is applied for, all public wells go for review by a Source Water Protection Hydrologist. What the driller does not know is how long that review is going to take and what we can do is set up in our permitting system an automatic reply to the driller where they receive an e-mail stating that if high ranking contaminants have been found within 1,000 feet of your well, your permit is going to have to go to review with either the Tank Management Section, Site Investigation and Restoration Section, or some other Program and may take longer than a 5 to 10 business day return. Something along those lines letting them know your application has been received and needs to go for review and if anything has been found out of the normal than your review may take longer." Mr. Keyser asked, "Could that go to not only the driller but also the land owner or applicant?" Mr. Rambo replied, "If we have their contact information." Mr. Keyser said, "Maybe if for public wells that should be on the application as to who is actually paying the driller to put the well in? Just so the communication can exist much better then send it to the driller, wait for the driller to send it to whoever's paying and then there's this timeframe of who knows what's going on." Mr. Rambo said, "The question is is whether our system can take an additional e-mail address that the driller would put in. We don't know if that's possible. For the online permitting system, we do have the return on the driller who has made the application."

Mr. Bryan said, "But the land owner's on that application." Mr. Rambo said, "The address, the name, and phone number of the land owner is on there but not the e-mail address." The Committee discussed about adding e-mail but the current system doesn't allow it. The system should be replaced within the next year or so. Mr. Grabowski and Mr. Homsey discussed contacting by a manual process. The Committee continued to discuss. Mr. Keyser mentioned

that ePermitting should take care of that problem for now and if we haven't mentioned it to the ePermitting team, we should. Mr. Grabowski said, "We haven't really gotten into that level of detail with them yet so if it comes out of this Committee that that is something we want to do and is part of the Plan, I think that leverages a need for them to work on that." Mrs. Smith said, "But it should be our responsibility to notify the land owner or should that be up to the well driller because the well drillers essentially paying to apply for the permit so why should it be our responsibility to contact the land owner?" Mr. Homsey said, "I'm just saying information is critical to the development. Anybody to whom the information is important it makes sense for them to have it for DNREC's purposes as well as for theirs so somebody doesn't raise an objection later that they didn't now." Mr. Homsey continued to discuss. Mr. Rambo said, "I don't know if we can make that a mandatory required field on our applications." Mr. Homsey told Mr. Rambo, "I don't think you need to." He continued to say to just allow people so they can be informed.

Mr. Keyser added, "At the end of the day, the person who owns the land or owns the utility that's paying for the driller to do it will be the owner of the well and responsible for all reporting in the future. I think providing that information up front about the status within the Department goes a long way towards our recent commitment to make sure that were not having an impact on business." He added, "If it can be done from an IT standpoint, I think it's very valuable." He also stated that staff shouldn't be burdened.

Mr. Rambo said, "The next three bullets go hand in hand. Currently, we try to do site inspections of all new public wells prior to being drilled. We send out a well technician to go out and look at the site to make sure it meets all general well permitting isolation distances from septic through the gamut of other things that are required in our regulations. We are also considering doing a post installation inspection to make sure that the well went in and where they said it's going to go. Not when their inspectors get out to a site. Not all potential wells are flagged for where they're going to be drilled by the driller so we want to verify that that is the case and have them go out and GPS the location and then do a windshield inspection after construction to make sure because a well permit is good for one whole year. You can apply for it in January and not have to drill it until 364 days from time of application. A lot can happen in a year. So go out and see if anything has changed from the pre-site inspection. Along with that post inspection, if the treatment has been set up with the water systems do a run through with them so we know what water treatment has been installed on site so that we have that section ready to go in our Source Water Assessment come time for publication. One of the things we've talked about during that well treatment run through is to GPS the distribution entry point, all sampling points for raw water and potentially have a one-time overhead drilling aerial photograph captured of the site because the State only does fly overs every five years or so for our Statewide aerial coverages." Mr. Homsey asked, "What would that be looking for?" Mr. Rambo answered, "That would be a very localized capture of the water facility." Mr. Homsey said, "To make sure it's in good working order?" Mr. Rambo said, "It is actually going to be potentially used for assisting the samplers that go out and sample the wells. We've talked this over with our State Lab Director, where they need to go to sample, and there's talk of even having bar codes or stuff associated with the sample taps and things like that for ease of identifying where the well water's coming from." Mr. Homsey said, "So it's recon? It's not any sort of monitoring?" Mr. Rambo replied, "No, this isn't monitoring. Anything that we can put

into the assessment to make it easy for the State and operators it's just going to make the document that much better and what we're going to propose is that the actual report that is generated for Source Water is going to just go to the Office of Drinking Water and the operator and the public facing document is going to be in ArcGIS storing that with just the basic information on the assessment. Not all the details." The Committee discussed about adding the aerial photo and how the fly overs are accomplished and even using drones. Mr. Grabowski said, "We're going to work through a test case and that will be presented at one of these CTAC meetings in the future and get feedback on it." Mrs. Shannon said, "That would be a good way to do it." Mr. Grabowski continued, "It won't go right to the public. It will come here first." Mrs. Mensch said, "So the end user audience is who for this?" Mr. Grabowski replied, "The general public." Mr. Rambo added, "A more detailed report will go to the Office of Drinking Water and to the Water Supply Section." Mrs. Mensch said, "And what is the goal for the general public's consumption? What are you trying to achieve there?" Mr. Rambo said, "It's just the basics of the assessment. This is your water system. The geology of where they get their water from, the contaminant inventory, the water quality, and what we can try to do as well is do the analysis over time. 'You were assessed in 2004 and if there was a reassessment in 2012 here it is', etc." Mrs. Mensch said, "So like a digital CCR almost?" Mr. Rambo said, "Kind of." Mr. Homsey mentioned, "It seems like an outreach and possibly education moment." He continued to discuss and Mr. Grabowski said to Mr. Homsey, "Right now the way the public gets the information is the .pdf of the Source Water Assessment with a lot of it redacted that you guys post up on the website." He added he doesn't think people are really getting the information off of the website. He continued, "The story map would be something that's a little more interactive. It's very visual, lots of photos and things of that nature just to try to increase awareness. Sure you could add the education component to that." Mr. Homsey said he thinks it's good to have this information out there and continued to discuss. Mrs. Mensch added how the Department of Agriculture did something similar to this. Mr. Rambo stated, "EPA has already provided us with a mock-up of a Source Water Protection story map that we're going to try to use for our use." Mr. Keyser added about the GPS shots sample task and how the Office of Drinking Water could help and Mr. Rambo agreed.

Mr. Rambo said, "The final bullet point deals with prioritization of Source Water Assessments. New water systems are always going to take priority in our Program, however, when we come to revisions, we're trying to put a ranking criteria on how we go about doing the prioritization and I'm currently working on a flow chart that would go through the process for an existing system, adding a new well, are they abandoning a well, and have there been water quality changes and things of that nature trying to incorporate that into the flow, major land use changes over the last five years." Mrs. Shannon discussed how it would be helpful for systems interconnecting. Mr. Rambo continued, "And who is making the request of the Department for the update. Is it a system request, a municipality, things of that nature. We'll be working some kind of rankings into that to try to figure out how we prioritize revisions of Source Water Assessments. Mr. Keyser asked Mr. Rambo, "Could you consider adding to that unconventional sampling events or studies or things like that. I'm just thinking about the USGS study that's currently going on." Mr. Keyser continued to discuss. Mr. Rambo said, "I believe that is what we incorporated into the Plan for that sampling is that once the data is returned they are prioritized in the que for Source Water Assessments."

REVIEW OF UPDATES TO TABLE 4-1 (Tentative / Pending Input from Committee) – Douglas E. Rambo, P.G., DNREC, Division of Water

Mr. Rambo said, "Our next item to talk about is the review of updates to Table 4.1. Keith (Mr. Mensch) and his group at the Office of Drinking Water have taken a look at the table. Laura (Mrs. Mensch) at the Department of Agriculture, Pesticides, has taken a look at the table. Todd (Mr. Keyser) has reached out to the Waste and Hazardous Substances Programs to look at updates to the table. It's a little too soon to get potential revisions back from them for today's meeting but I just wanted to let everyone know that there has been progress made on this. Keith (Mr. Mensch) has assured me that there have been a number of updates from the Office of Drinking Water. Laura (Mrs. Mensch) let me know that they have a number of additional pesticides they would like added to this. Ross (Mr. Elliott) has let me know that MTBE is predominately missing from the petroleum hydrocarbon section and Todd (Mr. Keyser) has reached out to Tanks, Superfund, and other Division of Waste and Hazardous Substances Programs to see what additional analytes should be included on this and they are going to give us some possible ways of displaying this data hopefully by next meeting." Mrs. Mensch said to Mr. Rambo, "When I talked to you before this meeting about how the compounds in this list are generated and the reasoning behind excluding or including compounds, part of why I asked you is because right now the chart, there's the number, a substance, and then there's a footnote and if you refer to the footnote it implies that all these substances were generated because they're regulated by the Department of Public Health, etc. and that seems like that's not the case. I know for the pesticides I was considering adding would potentially fall outside that." Mr. Rambo said, "If you look under the column that has the maximum contaminant level, there's a (1) after all of the ones that are related to that footnote. Anything that doesn't have a (1) in that column is not regulated under the Safe Drinking Water Act." Mrs. Mensch said, "At the top, the header is where there's also a (1) and implies that all these substances refer to this footnote as well. I move that you strike the (1)."

Mr. Mensch asked Mr. Rambo, "Aside from the table, 4.1 talks about contaminants of concern and these contaminants of concern are defined in that paragraph. Have we already discussed whether or not we should reconsider this definition and revising this definition for the contaminants of concern?" Mrs. Shannon added, "If you add contaminants, so pesticides that weren't regulated, how are they monitored?" Mrs. Mensch and Mrs. Shannon continued to discuss. Mr. Mensch brought up again this is why the definition needs to be revisited so everyone's clear. The Committee continued to discuss. Mr. Rambo said, "I see no reason why we cannot change this definition. It was not, I don't believe, defined in the definition section of the document. So we have the opportunity to clarify this." Mr. Mensch discussed things that can be added. The Committee continued to discuss contaminants to be added to the definition and specifying PFAS and PFOA. Mr. Rambo and Mr. Mensch also discussed the table format and if updates can be made. Mr. Grabowski asked Mr. Mensch or anyone to submit any definition changes and they can be discussed at the next meeting. Mr. Keyser said, "How about we just say we've identified a list of regulated and unregulated substances that are part of this." He continued, "Don't even call it contaminants of concern because I don't think it's the right thing

to use." Mrs. Mensch suggested calling it contaminants of interest. The Committee discussed and Mr. Keyser agreed with Mrs. Mensch's suggestion and others agreed. Mr. Keyser continued to discuss. Mr. Mensch said, "I'll work on a proposal for redefining it." Discussion continued about using regulated and unregulated and also testing to be included.

Mr. Rambo thanked everyone for their comments today and mentioned the next meeting is scheduled for March 28, 2019, at 10:00 a.m. in the Tidewater conference room.

ADJOURN - Douglas E. Rambo, P.G., DNREC, Division of Water

Meeting adjourned at approximately noon.

These minutes are not intended to be a detailed record. They are for the use of the Source Water Assessment and Protection Program, Source Water Assessment Plan Subcommittee members in supplementing their personal notes and recall of Committee discussions and presentations and to provide information to Committee members unable to attend. Minutes recorded and submitted by Kimberly Burris.

Attendees are listed below alphabetically, last name first:

Bryan, Walt – Owner of Walt Bryan Enterprises

Elliott, Ross – DNREC, Division of Waste & Hazardous Substances, Tank Management Branch

Grabowski, Matthew – DNREC, Division of Water, Water Supply Section Manager

Haggerty, Kenneth – Artesian Water

Homsey, Andrew – DGS, Water Resources Agency

Keyser, Todd – DNREC, Waste and Hazardous Substances

Magliocchetti, Cathy – U.S. EPA Region 3

Mensch, Keith – Division of Public Health, Office of Drinking Water

Mensch, Laura – Department of Agriculture

Rambo, Douglas – DNREC, Division of Water, Source Water Protection Program

Shannon, Sheila – Tidewater Utilities

Smith, Samantha – DNREC, Division of Water, Source Water Protection Program